

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 14875-0158US1	Application No. 10/574,827
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)		Applicant Akira Hayasaka et al.	
		Filing Date March 27, 2007	Group Art Unit 1656
(37 CFR §1.98(b))			

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
/CMK/	1	6,238,891	05/29/2001	Maiorcella et al.	████████	████████	
/CMK/	2	2002/0119530	08/29/2002	Maiorcella et al.	████████	████████	
/CMK/	3	2007/0154469	07/05/2007	Irie et al.	████████	████████	

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
/CMK/	4	EP 0 492 409	07/01/1992	Europe	████████	████████		
	5	WO 89/01975	03/09/1989	WIPO	████████	████████		
	6	WO 89/04867	06/01/1989	WIPO	████████	████████		
↓	7	WO 03/046162	06/05/2003	WIPO	████████	████████		
/CMK/	8	WO 2005/005636	01/20/2005	WIPO	████████	████████	English abstract	

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
/CMK/	9	ARYA et al., "Mapping of Amino Acid Residues in the C <sub>3</sub> Domain of Mouse IgM Important in Macromolecular Assembly and Complement-Dependent Cytolysis," <i>J. Immunol.</i> , 152:1206-12 (1994)
	10	BREWER et al., "Mechanism and Subcellular Localization of Secretory IgM Polymer Assembly," <i>J. Biol. Chem.</i> , 269:17338-48 (1994)
	11	CATTANEO et al., "Polymeric Immunoglobulin M is Secreted by Transfectants of Non-Lymphoid Cells in the Absence of Immunoglobulin J Chain," <i>EMBO J.</i> , 6:2753-58 (1987)
	12	GREEN, L., "Antibody engineering via genetic engineering of the mouse: XenoMouse strains are a vehicle for the facile generation of therapeutic human monoclonal antibodies," <i>J. Immunol. Methods</i> , 231:11-23 (1999)
	13	HARUTA et al., "Class-Switching of the IgM Type Anit-Adenocarcinoma Human Antibody HB4C5 into an IgG1 Type Resulted in the Loss of the Antigen Binding Ability," <i>Human Antibodies</i> , 8:137-145 (1997)
	14	HOON et al., "Molecular cloning of a human monoclonal antibody reactive to ganglioside GM3 antigen on human cancers," <i>Cancer Res.</i> , 53:5244-50 (1993)
	15	HUANG et al., "Production of Recombinant Murine-Human Chimeric IgM and IgG Anti-Js <sup>b</sup> For Use in the Clinical Laboratory," <i>Transfusion</i> , 43:758-764 (2003)
↓	16	HUGHEY et al., "Production of IgM Hexamers by Normal and Autoimmune B Cells: Implications for the Physiologic Role of Hexameric IgM," <i>J. Immunol.</i> , 161:4091-97 (1998)
/CMK/	17	IRIE et al., "Phase I pilot clinical trial of human IgM monoclonal antibody to ganglioside GM3 in patients with metastatic melanoma," <i>Cancer Immunol. Immunother.</i> , 53:110-117 (2004)

Examiner Signature	/Chih-Min Kam/	Date Considered	10/19/2009
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 14875-0158US1	Application No. 10/574,827
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)		Applicant Akira Hayasaka et al.	
		Filing Date March 27, 2007	Group Art Unit 1656
(37 CFR §1.98(b))			

Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner Initial	Desig. ID	Document	
/CMK/	18	KUNERT et al., "Characterization of Molecular Features, Antigen-Binding, and In Vitro Properties of IgG and IgM Variants of 4E10, an Anti-HIV Type 1 Neutralizing Monoclonal Antibody," <i>AIDS Res. Hum. Retroviruses</i> , 20:755-762 (2004)	
	19	MAYUS et al., "Inhibition of <i>In Vitro</i> Anti-DNA B-Cell Responses by Cyclosporine," <i>Cell. Immunol.</i> , 94:195-204 (1985)	
	20	MENG et al., "J Chain Deficiency in Human IgM Monoclonal Antibodies Produced by Epstein-Barr Virus-Transformed B Lymphocytes," <i>Eur. J. Immunol.</i> , 20:2505-08 (1990)	
	21	MONICA et al., "Comparative Biochemical Characterization of a Human IgM Produced in Both Ascites and <i>In Vitro</i> Cell Culture," <i>Biotechnology</i> , 4:512-515 (1993)	
	22	NILES et al., "Polymer IgM Assembly and Secretion in Lymphoid and Nonlymphoid Cell Lines: Evidence that J Chain is Required for Pentamer IgM Synthesis," <i>Proc. Natl. Acad. Sci. USA</i> , 92:2884-88 (1995)	
	23	RANDALL et al., "Direct Evidence That J Chain Regulates the Polymeric Structure of IgM in Antibody-secreting B Cells," <i>J. Biol. Chem.</i> , 267:18002-07 (1992)	
	24	RANDALL et al., "J Chain Synthesis and Secretion of Hexameric IgM is Differentially Regulated by Lipopolysaccharide and Interleukin 5," <i>Proc. Natl. Acad. Sci. USA</i> , 89:962-966 (1992)	
	25	SHITARA et al., "Immunoglobulin Class Switch of Anti-Ganglioside Monoclonal Antibody from IgM to IgG," <i>J. Immunol. Methods</i> , 169:83-92 (1994)	
	26	SORENSEN et al., "Structural Requirements for Incorporation of J Chain into Human IgM and IgA," <i>Int. Immunol.</i> , 12:19-27 (2000)	
	27	STOCKS et al., "Production and Isolation of Large Quantities of Monoclonal Antibody Using Serum-Free Medium and Fast Protein Liquid Chromatography," <i>Hybridoma</i> , 8:241-247 (1989)	
	28	STOLL et al., "Effects of culture conditions on the production and quality of monoclonal IgA," <i>Enzyme Microb. Technol.</i> , 21:203-211 (1997)	
	29	TACHIBANA, "Gene expression of joining chain in murine peritoneal B-1 cells," <i>Nihon Univ. Dent. J.</i> , 76:425-433 (2002) (English abstract included)	
	30	WOOD et al., "High Level Synthesis of Immunoglobulins in Chinese Hamster Ovary Cells," <i>J. Immunol.</i> , 145:3011-16 (1990)	
	31	YOU'D et al., "Synergistic roles of IgM and complement in antigen trapping and follicular localization," <i>Eur. J. Immunol.</i> , 32:2328-37 (2002)	
	32	U.S. EXAMINER SHARON X. WEN, USPTO Restriction Requirement in U.S. App. Ser. No. 10/564,665, dated July 9, 2008, 7 pages	
	33	FISH & RICHARDSON P.C., Response to Restriction Requirement dated July 9, 2008, in U.S. App. Ser. No. 10/564,665, filed August 8, 2008, 1 page	
	34	U.S. EXAMINER ILIA I. OUSPENSKI, USPTO Restriction Requirement in U.S. App. Ser. No. 10/564,665, dated November 12, 2008, 6 pages	
	35	FISH & RICHARDSON P.C., Response to Restriction Requirement dated November 12, 2008, in U.S. App. Ser. No. 10/564,665, filed January 9, 2009, 1 page	
↓	36	U.S. EXAMINER ILIA I. OUSPENSKI, USPTO Non-Final Office Action in U.S. App. Ser. No. 10/564,665, dated April 20, 2009, 16 pages	
/CMK/	37	JAPANESE PATENT OFFICE, International Search Report for App. Ser. No. PCT/JP2004/010444, mailed October 26, 2004, 4 pages	

Examiner Signature	/Chih-Min Kam/	Date Considered	10/19/2009
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No. 14875-0158US1	Application No. 10/574,827
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant Akira Hayasaka et al.	
		Filing Date March 27, 2007	Group Art Unit 1656

<b>Other Documents (include Author, Title, Date, and Place of Publication)</b>			
Examiner Initial	Desig. ID	Document	
/CMK/	38	JAPANESE PATENT OFFICE, International Preliminary Report on Patentability for App. Ser. No. PCT/JP2004/010444, dated June 3, 2005, 5 pages	
	39	JAPANESE PATENT OFFICE, International Search Report for App. Ser. No. PCT/JP2004/014919, mailed December 7, 2004, 4 pages	
	40	JAPANESE PATENT OFFICE, International Preliminary Report on Patentability for App. Ser. No. PCT/JP2004/014919, dated September 12, 2005, 14 pages	
	41	U.S. EXAMINER SHARON X. WEN, USPTO Restriction Requirement in U.S. App. Ser. No. 10/575,192, dated April 15, 2008, 7 pages	
	42	FISH & RICHARDSON P.C., Response to Restriction Requirement dated April 15, 2008 in U.S. App. Ser. No. 10/575,192, filed September 12, 2008, 1 page	
	43	U.S. EXAMINER SHARON X. WEN, USPTO Non-Final Office Action in U.S. App. Ser. No. 10/575,192, dated January 26, 2009, 11 pages	
	44	JAPANESE PATENT OFFICE, International Search Report for App. Ser. No. PCT/JP2004/014935, mailed January 25, 2005, 4 pages	
↓	45	JAPANESE PATENT OFFICE, International Preliminary Report on Patentability for App. Ser. No. PCT/JP2004/014935, 14 pages	
/CMK/	46	EUROPEAN EXAMINER PETER BUMB, European Search Report for App. Ser. No. EP 04 79 2204, mailed July 11, 2007, 3 pages	

Examiner Signature  /Chih-Min Kam/	Date Considered  10/19/2009
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	